

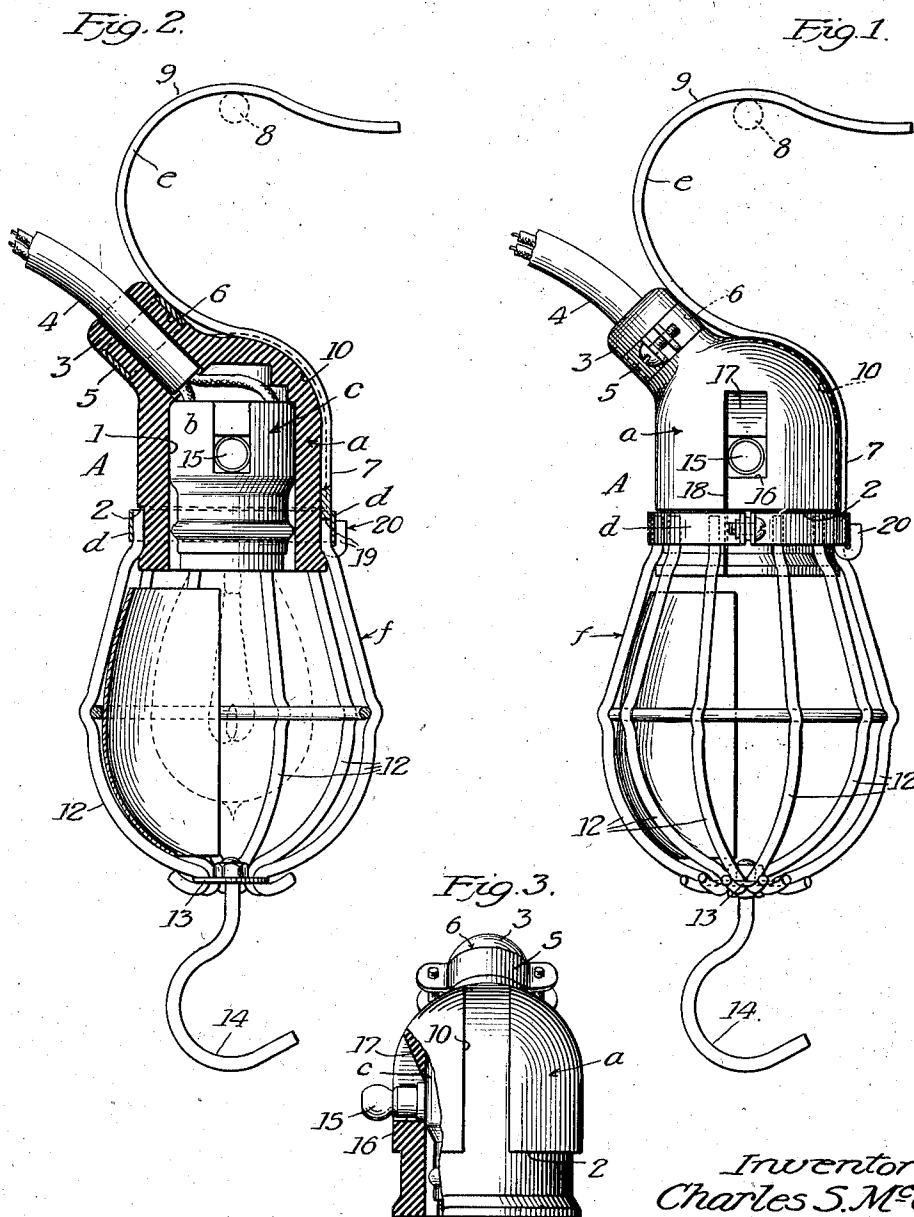
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PORTABLE INCANDESCENT LAMP

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PORTABLE INCANDESCENT LAMP

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This invention relates to portable electric lamps.

Stated generally, a principal object of the invention is to provide a portable incandescent lamp of new and novel construction, which has important advantages over conventional types of portable electric lamps of which I have any knowledge.

Important specific advantages are as follows:

10 The provision of a combination hook and handle rigidly secured to the holder member of the lamp, whereby a single member will serve the double purpose of suspending the lamp and carrying and manipulating or handling it;

15 To provide simple means for anchoring the conductor wires or cable to the holder member of the lamp, thus relieving the connections of the conductor wires to the socket member of the lamp from all stresses due to tension exerted thereon;

20 To provide a construction whereby the combined hook and handle member will be secured to the holder member and will conform to the contour thereof, being disposed in such position relative thereto that it will form a guard for said holder member, which will protect it from possible damage by violent contact with a suspension member, due to carelessness in engaging said hook and handle member therewith;

30 To provide a lamp which has hooks at both of its ends, whereby it may be suspended with either end depending;

35 To provide a combination suspension hook and handle member, the suspension hook of which has a relatively large radius with a point of suspension substantially in line with the axis of the lamp, and the end of the hook off-set an appreciable distance from the axis of the lamp, whereby the lamp may be suspended with its axis disposed substantially vertically or inclined at an angle to the vertical;

40 To provide a lamp the suspension hook or member of which is made of flat bar metal of sufficient width that when engaged with a suspension member, its position under gravity will be substantially stable.

45 To effect the objects thereof, a portable electric lamp embodying my invention comprises the various features, combinations of features and details of construction hereinafter described and claimed.

50 In the accompanying drawing, in which the invention is fully illustrated,

55 Figure 1 is a side view of a portable electric lamp embodying my invention and improvements,

shown as suspended by the combination hook and handle member with the lamp and associated parts depending.

Figure 2 is a view substantially similar to Fig. 1, parts thereof being shown in section; and

Figure 3 is a detached view, partly in section of the holder member, taken from the right side of Fig. 1.

Describing the invention with reference to the drawing, a lamp embodying my invention and improvements, for convenient reference designated as a whole A, comprises a body portion or holder designated as a whole a, a socket member designated as a whole b, a split clamping ring or collar d, a combination suspension hook and handle designated as a whole e, and a lamp guard or cage designated as a whole f.

The body portion or holder a, is made of suitable resilient material, preferably rubber, vulcanized to such an extent that it will be sufficiently rigid to retain its shape under contemplated operating conditions, and is provided with a recess 1 adapted to receive and hold the socket member b, which may be of any desired construction, and which, as assembled for use, is detachably secured in engagement with said recess by the split clamping ring or collar d, which as shown, interlocks with an exterior annular groove 2 formed in said body portion or holder adjacent its open end. Also, as shown, the closed end of said body portion or holder a is rounded and projecting therefrom is a hollow boss 3—preferably formed integral therewith and which, as shown, is disposed with its axis at an angle of approximately forty-five degrees (45°) to the longitudinal axis of said body portion or holder. The hole through said boss 3 communicates directly with the inner end of the recess 1 in the body portion or holder a and is proportioned to permit the passage of the conductor wires or cable 4 through the closed end of said body portion in making the wiring connections to the socket member b, as will readily be understood. As shown, also, the walls of the boss 3 are adapted to be compressed or contracted into strong friction engagement with the conductor wires or cable 4 by means of a split collar 5 applied to the outside of said boss and which preferably is confined in an annular groove 6 formed therein. With the described construction, it is obvious that when said boss is clamped to the conductor wires or cable 4, all stresses due to a pull or tension on said conductor wires or cable will be transferred to the body portion b, and the elec-

tric connections to the socket member *b* being entirely relieved from such stresses.

In the preferable construction shown, also, the combination hook and handle *e* is made from a flat bar of suitable stock, preferably steel, of suitable width and thickness to afford adequate strength for its design purpose—say, for usual purposes, one-half an inch ($\frac{1}{2}$ "') wide, by one-eighth of an inch ($\frac{1}{8}$ "') thick, but which may be varied as desired to meet varying conditions.

The shank 7 of said hook and handle *e* is rigidly secured to the split clamping ring or collar *d*, the relation being such that the portion thereof adjacent its attached end will conform substantially to the contour of the body portion or holder *a*, being bent over the rounded, closed end thereof and then reversely to form an open-side hook, as shown, the relation being such that the boss 3 will be positioned behind the closed side of said hook and in close proximity thereto.

A particular advantage of the construction described in the foregoing paragraph is that the hook and handle member *e* will form a guard which will protect the body portion or holder *a* from contact with a suspension support, indicated diagrammatically at 8, in the act of engaging the hook proper 9 therewith, with resultant possible damage to said holder.

In accordance with the invention, also, the body portion or holder *a* and the combined hook and handle *e* are maintained in contemplated operative alignment with each other by engagement of the shank of said hook and handle portion with a groove 10 in the body portion or holder which forms a lateral extension of the annular groove 2, lengthwise of said body portion or holder.

In the preferable construction shown, said hook proper 9 is curved on a relative long radius with its position of repose under gravity substantially in line with the longitudinal axis of the lamp. As shown, also the outer portion of said hook proper is bent reversely with its extreme end below the suspension point of the hook and appreciably out of line with the longitudinal axis of the lamp, whereby, when the lamp is suspended from the end of said hook and is free to respond to gravity, the body of the lamp will swing into position beneath the suspension support.

The guard or cage *f* may be of any usual or desired construction and the construction of a guard or cage suitable for the purpose will readily be understood and can readily be supplied by mechanics familiar with such structures from an examination of the drawing, without a description thereof in detail.

Briefly described said guard or cage consists of spaced wires 12, the outer ends of which are connected to a plate 13 so as to have limited relative movement, and the inner ends of which are rigidly connected to a split ring, which, for convenience and economy of manufacture, is the split clamping ring *d*, to which the combination suspension hook and handle *e* is secured and by means of which the socket member *b* is clamped securely in engagement with the recess 1 in the body portion or holder *a*, as previously explained.

In accordance with the invention, also, in addition to the combination suspension hook and handle *e*, a usual suspension hook 14 is secured in the plate 13 of the lamp cage or guard, thus providing for suspending the lamp with either end depending.

In accordance with usual practice, the lighting circuit of the lamp is controlled by a suitable

switch, which we will assume is a usual type or form of toggle switch but which may be any suitable or desired form of switch. As shown, the switch operating lever 15 applied to the socket member *b* projects through a hole 16 formed in the recessed portion of the body portion or holder of the lamp, preferably in such position that the lamp may be turned "on" and "off" by a person holding the lamp, using one hand only, the hole or opening 16 being relieved or cut away at one end, as shown at 17, to permit necessary movement of said switch member. Socket members *b* suitable for the purpose may be purchased commercially and need not, therefore, be shown or described in detail.

To provide for conveniently inserting the socket member *b* into and removing it from the body portion or holder *a*, said body portion or holder is slit or severed by means of a cut extending from the open end thereof to the proximate end of the hole 15, preferably in line with the side of said opening, as shown at 18.

Simple and preferable means for securing the combination hook and handle to the split ring *d* consists in forming a slot 19 in the end of said hook and handle of sufficient width to receive the end of a cage or guard wire 12, bending the slotted end of said hook and handle member *e* between the ends of the slot therein, to form hooks 20, the bent over ends of which are spaced a sufficient distance apart to provide for hooking the same over the clamping ring or collar *d* with the bent over ends of the hook disposed outwardly, with one on each side of a guard wire 12 and the end of said guard wire in contact with the end of the slot in said hook and handle member. Having assembled the parts in the relation specified, the hooks 20 are pressed down into firm contact with the ring or collar *d*, thus completing the operation.

I claim:

1. A portable incandescent electric lamp, comprising a lamp socket having electrical contacts and means for making electrical connections thereto, a holder made of resilient insulating material provided with a recess arranged and proportioned to receive the lamp socket and with an exterior annular groove, a split collar arranged to interlock with said groove, means for securing said split collar to said holder in engagement with said annular groove, a combined suspension hook and handle rigidly secured to said split ring or collar, said recessed holder being provided with a hole in its closed end which communicates with the recess therein through which as assembled for use, the electrical conductors connected to the lamp socket extend, the relation being such that the shank portion of the suspension hook and handle adjacent its point of attachment to the ring or collar secured to the holder conforms substantially to the contour of said holder and is bent around the closed end thereof and then reversely to form an open-sided hook proportioned and arranged to be conveniently grasped and firmly held.

2. The lamp specified in claim 1, in which, as assembled for use, the holder member and combined hook and handle member are maintained in substantially fixed relation to each other by engagement of said hook and handle member with a longitudinal groove formed in said holder member.

3. The lamp specified in claim 1, in which the combined hook and handle member is made of flat bar stock, thereby limiting turning movement

of the lamp on a suspension member, and permitting engagement of the free end of said hook with a space only slightly larger than the thickness of said handle member.

5 4. The lamp specified in claim 1, the split ring of which, secured in the annular groove formed in the holder member and to which the combined hook and handle is secured, forms a part of a lamp cage or guard arranged to enclose a light
10 bulb secured in the lamp socket.

15 5. The lamp specified in claim 1, the holder member of which comprises a boss on its closed end provided with a hole or opening for the passage of the conductor wires, said boss being positioned at the closed side of the suspension

hook, and extending at an angle to the axis of the holder member.

6. The lamp specified in claim 1, in which the hook proper of the combined suspension hook and handle member is curved on a relatively long 5 radius with its suspension point substantially in line with the longitudinal axis of the lamp, and the outer portion of the hook proper bent reversely with its extreme end below the suspension point of the hook and appreciably beyond the 10 axis of the lamp, whereby when hung from the end of the hook and free to respond to gravity the body of the lamp will swing beneath the suspension support.

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